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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/699,281

10/30/2003

Paul K. Wolber

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AGILENT TECHNOLOGIES INC.  
INTELLECTUAL PROPERTY ADMINISTRATION, LEGAL DEPT.  
MS BLDG. E P.O. BOX 7599  
LOVELAND, CO 80537

EXAMINER

CROW, ROBERT THOMAS

ART UNIT

PAPER NUMBER

1634

MAIL DATE

DELIVERY MODE

03/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/699,281

Applicant(s)

WOLBER ET AL.

Examiner

Robert T. Crow

Art Unit

1634

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 February 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: None.  
Claim(s) objected to: None.  
Claim(s) rejected: 1-13 and 21-25.  
Claim(s) withdrawn from consideration: 14-20 and 26-28.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_

  
RAM R. SHUKLA, PH.D.  
SUPERVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because: Regarding the rejection of claims 1-13 under 35 USC 103(a), Applicant argues on pages 8-10 of the Remarks that the combined teachings of McGall in view of Weng et al do not teach detection of complexes between the depurination probes and a target nucleic acid.

However, as indicated on pages 4-6 of the previous Office Action, McGall teaches detection of depurination probes by cleavage of said depurination probes after exposure to a test condition (Figure 8 and column 9, lines 39-49). The detection of McGall comprises detecting remaining label from the uncleaved oligonucleotides that are still complexed on the array (column 9, lines 50-67). Complexes of the depurinated probes are cleaved as well; thus, all of the depurination probes on the array are detected by the absence of label. The group of cleaved depurination probes includes depurination probes that were present in complexes; thus, the cleavage step detects all depurination probes, including those that were in complexes.

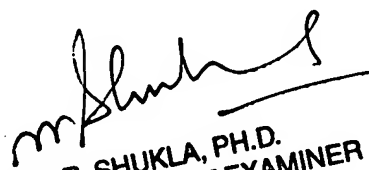
While McGall teaches the test conditions include operating conditions (column 11, lines 20-41) and that operating conditions include hybridization of nucleic acids to the array (column 13, lines 33-57), the specific embodiment of hybridization of a nucleic acid, which is a target, to the array followed by cleavage is not explicitly taught by McGall.

However, Weng et al teach hybridizing nucleic acids in the form of mRNA, which are targets, to a microarray as a test condition (column 4, lines 58-67 and column 8, lines 60-67). Weng et al thus clearly teach the step of hybridizing a target nucleic acid (i.e., the mRNA) to an array as a test condition. The array test condition of Weng et al is the modification applied to the test condition of McGall, which results in the added benefit of controlling the quality of the array production process as taught by Weng et al (column 5, lines 29-32).

The modification of the teachings of McGall with the target hybridization test condition of Weng et al therefore results in a method comprising all of the steps of the instant claims. The "resultant binding complexes" of the previous version of the claims were previously interpreted as binding complexes between the depurination probe and the target nucleic acid because of the limitation "resultant" that was present in the previous version of the claims. The same rejections would therefore be applied. The determination of the depurination event taught by McGall would occur as a result of detecting the binding complexes between the target nucleic acids and the depurination probes. McGall achieves this by comparing a first cleaved area of the array with a second identical uncleaved area of the array (column 9, lines 61-67). The cleavage step results in the detection of all of depurination probes, including depurination probes that were present in complexes. Thus, the cleavage step detects all depurination probes, including those that were in complexes. The complexes are detected by the absence of a signal in the treated area.

As stated in the previous Office Action, the ordinary artisan would have been motivated to make the modification because the modification would have resulted in a method of detecting depurination reaction products that has the added advantage of controlling the quality of the array production process as taught by Weng et al (column 5, lines 29-32).

Regarding the rejection of claims 21-25 under 35 USC 102(b) as anticipated by McGall, Applicant argues on pages 6-8 of the Remarks that McGall does not teach detection of the binding complexes between the depurination probe and the target nucleic acid. However, the amended claims would be rejected under 35 USC 103(a) for the reasons set forth in the rejection of claims 1-13 under 35 USC 103(a) as indicated in the previous Office Action and as outlined above.

  
RAM R. SHUKLA, PH.D.  
SUPERVISORY PATENT EXAMINER  
